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# The Long and Winding Road from Positive Psychology Theory to Corporate Application

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# The Long and Winding Road from Positive Psychology Theory to Corporate Application

## **Abstract**

This paper is intended to develop preliminary thoughts regarding implementation of positive psychology methods in organizations for the benefit of both the workforce and business. The first section examines the extension of positive psychology into scholarship for positive organizations. The second section reports informal qualitative interviews with selected senior corporate executives. The focus of investigation is the preliminary discovery regarding corporate awareness of, and interest in, positive psychology. The interviews will also investigate corporate executives' attitudes regarding the practical use of academic research. The paper concludes by digging deeply into an advanced positive construct for organizations, psychological capital, substantiating that it is a greatly developed, well-studied topic acceptable for organizational application. Psychological capital will be presented as a model representing the conclusions reached in this paper regarding the state of positive psychology applications in organizations.

## **Keywords**

Positive Organizations, Positive Business, Positive Executives, Positive Psychology, Positive Psychology Relevance, Academic/Business Translation, Academic/Business Communication, Academic/Business Facilitation, Psychological Capital, PsyCap

## **Disciplines**

Organizational Behavior and Theory | Psychology

The Long and Winding Road from Positive Psychology Theory to Corporate Application

Garrison M. Kitchen

University of Pennsylvania

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In Partial Fulfillment of the Requirements for the Degree of

Master of Applied Positive Psychology

Advisor: Robert W. Rebele

August 1, 2016

The Long and Winding Road from Positive Psychology Theory to Corporate Application

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Capstone Project  
Master of Applied Positive Psychology  
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Abstract

This paper is intended to develop preliminary thoughts regarding implementation of positive psychology methods in organizations for the benefit of both the workforce and business. The first section examines the extension of positive psychology into scholarship for positive organizations. The second section reports informal qualitative interviews with selected senior corporate executives. The focus of investigation is the preliminary discovery regarding corporate awareness of, and interest in, positive psychology. The interviews will also investigate corporate executives' attitudes regarding the practical use of academic research. The paper concludes by digging deeply into an advanced positive construct for organizations, psychological capital, substantiating that it is a greatly developed, well-studied topic acceptable for organizational application. Psychological capital will be presented as a model representing the conclusions reached in this paper regarding the state of positive psychology applications in organizations.

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The list of acknowledgements for this past year of growth for me is too long for inclusion, but it numbers dozens of new friends for life among my classmates, assistant instructors, and instructors (and, of course, my AF, who kept me out of trouble, sometimes.)

## **Background and Introduction**

### **Background**

My recent re-immersion into the academic world of positive psychology comes on the heels of thirty-five years' experience in the business world. During my business career, I have witnessed several organically created positive organizations. By organically created, I am suggesting a Darwin-like adaptation, in which the organization started with a goal of positivity and found its own way to achieve it. These organizations were led by executives that intuitively understood many important organizational and individual psychological needs, in particular encouraging energized cooperation among the firms' members. These businesses had something intangible that caused them to excel against competitors with significantly greater resources and opportunities. As importantly, the employees were happy while their businesses succeeded.

Like many of my classmates, I happened upon the University of Pennsylvania's Master of Applied Positive Psychology (MAPP) program by chance. I believe I was called to MAPP to discover more about the *something* that these businesses possess, and discover how I might influence businesses in a way that was helpful to employees, which would in turn drive profitability.

During the fall MAPP Summit, the once-a-year gathering of current and previous MAPP students, Martin Seligman, the founding organizer of positive psychology, offered assessments of various vertical advances in positive psychology (personal communication, October 18, 2015). He spoke of his frustration with the business community for its lack of progress; at the outset of the positive psychology movement, he thought that this would be a fertile ground for application, but from his perspective little has actually taken hold. He also stated that he knew of no

academic study that represented a gold-standard of empirical research that supported the concept of well-being promoting improved performance, inferring that the lack of such gold-standard evidence may be inhibiting the acceptance of positive psychology in the corporate world.

It was at this moment that my calling began to crystalize, and my commitment formed to discover a way to be involved in convincing the corporate world that application of positive psychology is a win-win for businesses and employees alike. I frequently pondered Seligman's view of positive psychology in business organizations. I started to develop additional hypotheses that might also be contributing to the lack of penetration into corporate environments, and I spoke with classmates who suggested that perhaps businesses have limited interest in positive approaches. Throughout the remainder of the fall and spring sessions of MAPP, I kept vigil for authors, articles, and data that might inform advancement of my thinking. It is from this background and motivation that this study of existing positive psychology methods for organizations and inquiry of corporate opinions regarding the opportunities for application is borne.

## **Introduction**

This paper sets out to test two of the proposed explanations for why positive psychology has not yet in Seligman's view made many in-roads in the corporate world. First, is there research of sufficient *rigor* to convince organizational decision-makers that investments in the positive will be worthwhile? Second, do business leaders consider the topics of positive psychology *relevant* enough to their work?

It begins by reviewing the history, development, areas of study, and impressive progress of positive psychology scholarship, followed by reviewing the mirrored path of positive psychology research for organizations. This offshoot of positive psychology developed to

address similar needs, and generally represents positive psychology repackaged for organizations and the workplace. The paper then presents the results of a series of discovery interviews conducted with a selected group of senior corporate executives, intended to gauge both their interest in positive psychology research and topics and their standards for evaluating research. In the final section, the paper examines a robustly studied conceptual positive construct for the workplace, psychological capital. It is this paper's contention that psychological capital has been *rigorously* tested and is demonstrably *relevant* to the interests of business leaders. These facts alone have not been enough to bring about much real-world application of psychological capital research, but the opportunity is ripe.

### **Part I: Research Review**

#### **Positive Psychology**

**History and background.** Depending on one's perspective, the field of positive psychology is either: thousands of years old, beginning in Athens with Aristotle and in the east with Confucius and Lao-Tsu (Ivanhoe, 2013; McMahon, 2013; Peterson, 2006); hundreds of years old, beginning with William James and passing through notable personality, social and humanistic psychologists of the twentieth century such as Jung, Allport, Maslow, Jahoda, Frankl, and Rogers (Froh, 2004; Taylor, 2001); or tens of years old, formally declared as an organized field of study in Seligman's APA presidential speech (Diener, 2009; Peterson, 2006; Seligman, 1999). There can be little argument, however, that even as Seligman planted a flag on behalf of the field of positive psychology, there were many important participants already advancing ideas and research contributing to the understanding of optimal human functioning. During the final decades of the last millennium, Deci and Ryan (1985) advanced theory and research in self-determination and motivation, Diener (1984) brought science to the study of subjective well-



being and happiness, Snyder (1994) developed hope theory, Bandura (1997) developed social cognitive theory and the scientific study of self-efficacy, Ryff (1989) developed the theory and construct of psychological well-being, and Baumeister and Leary (1995) studied the need to belong as the fundamental human motivation. These represent a few of those that were busy developing, on their own, theories that would contribute to the soon-to-be-expanding collection of research in positive psychology.

No matter which view one takes as to the official founding of positive psychology, the latter half of the twentieth century witnessed the vast preponderance of research and effort in psychology directed primarily toward the understanding and treatment of mental pathology (Seligman & Csikszentmihalyi, 2000; Peterson, 2006). There were many important advances in treating mental illness during this period, but there also resulted a dearth of effort toward studying positive mental health. Recognizing that the absence of mental illness does not create mental health, Seligman stated in his APA President's Address (1999) his belief "...that since the end of World War II, psychology has moved too far away from its original roots, which were to make the lives of all people more fulfilling and productive, and too much toward the important, but not all-important, area of curing mental illness" (p. 559), following with "...psychology has become a science largely about healing. It concentrates on repairing damage within a disease model of human functioning. Such almost exclusive attention to pathology neglects the flourishing individual and the thriving community" (pp. 560-561). Despite the progress in identifying and treating mental illness, the incidence of depression had mushroomed, and the average age of onset had dropped down to the teens (Seligman, 1999; Seligman & Csikszentmihalyi, 2000). The goal in creating an organized field in positive psychology was not only to provide paths forward for flourishing individuals and communities, but also to enhance

strengths that would serve to buffer against the rising epidemic of mental pathology (Seligman, 1999; Seligman & Csikszentmihalyi, 2000). The final paragraphs of Seligman's (1999) speech included the following: "We have misplaced our original and greater mandate to make life better for all people – not just the mentally ill" (p. 562); and "[The] mission is to partake in launching a science and a profession whose aim is the building of what makes life most worth living" (p. 562). Positive psychology, then, is oriented towards the positive and is based on a rigorous scientific approach to human flourishing (Peterson, 2006).

**Objectives.** The formal recognition of the field included two important pillars of guidance. The first was the creation of an organized and integrated network of research professionals, encouraging the field to coalesce and flourish (Diener, 2009). The second was emphasizing a difference from much of the prior writings on positive human function by suggesting that the newly organized field would be dedicated to a strong grounding in scientific research (Seligman & Csikszentmihalyi, 2000). Positive psychology would aim to use this integrated network and the scientific method to shed new light on what makes life worth living.

As was suggested by Aristotle (trans. 1999) thousands of years ago, many people around the world still pursue happiness as an important goal. Happiness has been shown to both cause and result from positive life outcomes in relationships, career, and health (Lyubomirsky, King, & Diener, 2005; Sin & Lyubomirsky, 2009). As presented above, mainstream psychology had become mired in the medical model of health, principally focusing on treatment of mental illness. But what is happiness?

Under the main umbrella of positive psychology there are multiple constructs and models of happiness. Martin Seligman's (2011) construct of flourishing is PERMA: Positive emotion, engagement, positive relationships, meaning, and accomplishment. Carol Ryff (1989) suggests

that high functioning is measured by psychological well-being (PWB), comprising the six eudaimonic constructs of self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Diener and Biswas-Diener (2008) offer a concept they refer to as psychological wealth, including many of the same constituents of PERMA and PWB, but also including spirituality, values and goals, physical health, and material sufficiency. Sin and Lyubomirsky (2009) posit that psychological well-being includes the absence of mental disorder and the presence of both subjective well-being (the traditional construct of happiness and positive affect) and eudaimonic well-being (Aristotle's [trans. 1999] approach to virtues that go beyond mere pleasure.) One simple way to think about flourishing is that it represents a person's best possible self.

**Growth and Breadth.** The growth and interest in positive psychology since the January 2000 issue of *American Psychologist* (Seligman & Csikszentmihalyi, 2000) is remarkable. In 1999, there was a single peer-reviewed article concerning positive psychology; between then and the end of 2013, there have been 1,335 peer reviewed articles linked to positive psychology (Donaldson, Dollwet, & Rao, 2015). Importantly, there was an increase in the number of such peer-reviewed articles in nearly every year, with 232 peer-reviewed articles linked to positive psychology published in 2013 alone. A separate study covering the period through 2011 expanded the search to include articles beyond peer-reviewed publications and focused on a broader range of topics related to positive psychology, this time finding 18,000 documents related to positive psychology (Rusk & Waters, 2013). These documents represented contributions from multiple areas including eight different fields of psychology, business and management, neuroscience, education, health, social sciences, and sport sciences. Similar to the Donaldson et al. (2015) study above, this investigation revealed a steady increase in the number

of documents over ten years, with 2,300 documents published in the final year of the study (Rusk & Waters, 2013).

Joseph (2015, p. 1) notes that the applications of positive psychology cover work, health, organizations, counseling and coaching, education, and public policy. As the field broadens its stance of inclusiveness, it is likely that many disciplines will contribute to the knowledge base of positive psychology. In his opening remarks during the first World Congress of Positive Psychology held in 2009, Seligman echoed these sentiments, suggesting that positive psychology, "...transform into positive social science, uniting psychologists, economists, policy-makers, philosophers, educators, health and business researchers and practitioners, and thinkers in the fields of religion and spirituality" (as cited in David, Boniwell, & Ayers, 2013, p. 1). Included in "Appendix A – Diversity of Positive Psychology Topics" is a partial listing of myriad and diverse topics associated with the study of positive psychology. Professionally, the umbrella of positive psychology has encouraged extended focus in several domains including education, the armed forces, healthcare, and organizations.

### **The Study of Positive Organizations**

**Introduction.** Encouraged by the early success, energy, and acceptance of the launch of positive psychology as an organized field, the search for "the positive" in organizations followed a similar path. Various actors that encouraged the use of positive lenses were aligned with the traditional fields of organizational behavior, organizational development, organizational psychology, and industrial psychology. These fields contained historical seams of positive approaches, but over time had given way to the relatively stronger power of the negative in organizations and became dedicated to the analysis of deficits (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Cameron, 2008). Soon after the formal launch of positive psychology

as a formal discipline, several organizational/management science scholars began building upon positive psychology's nascent constructs and theories, encouraging their respective fields to embrace positive approaches and targets in organizations. There was no leading figurehead; the initiative toward the positive manifested through a constellation of different appellations, and began coalescing around several loci of influence. These new movements include positive organizational psychology, positive organizational scholarship, positive organizational behavior, and applied positive psychology. Positive organizational scholarship and positive organizational behavior are the two areas that have captured the lion's share of attention and recognition (Ko & Donaldson, 2011). Each of these areas emanates from a different origin of study, and each follows a slightly different view of scholarship for positive organizations. However, among the group, there is far more overlap than divergence. Each movement shares a root in positive psychology, emphasizes focus on the positive, and to varying degrees, is dedicated to the adherence to scientific process. Each has a recognized geographic center related to its founders, but includes an impressive array of scholars from diverse institutions (see Cameron, Dutton, & Quinn, 2003b; Cameron & Spreitzer, 2012b; Donaldson, Csikszentmihalyi, & Nakamura, 2011; Linley, Harrington, & Garcea, 2013b). Another important contributor to positive scholarship for organizations comes from the Gallup Organization. Gallup predates each of the other positive organizational initiatives and has been studying strengths for decades (Rath, 2007). Articles published covering the positive in organizations are also published under the following banners: positive psychology at work, positive workplace, and positive organization (Ko & Donaldson, 2011). Although they are presented separately here, there is much collaboration across these areas as evidenced by the fact that the various handbooks edited by leading figures of each group tend to include chapters from representatives of the other groups (see Cameron et al., 2003b;

Cameron & Spreitzer, 2012b; Donaldson et al., 2011; Linley et al., 2013b). This section presents a brief introduction to each of these areas, with an emphasis on positive organizational scholarship and positive organizational behavior.

**Positive Organizational Psychology.** Positive organizational psychology (POP) is principally led by scholars from Claremont Graduate School – Mihaly Csikszentmihalyi, Stewart Donaldson, Jeanne Nakamura, and Ia Ko (Ko & Donaldson, 2011). POP developed from the field of organizational psychology and defines itself as, “the scientific study of positive subjective experiences and traits in the workplace and positive organizations, and its application to improve the effectiveness and quality of life in organizations” (Ko & Donaldson, 2011, p. 138). POP includes in its focus studies of strengths, coaching, positive leadership, positive organizational development and change, appreciative inquiry, organizational virtuousness, psychological capital, and flow at work (Ko & Donaldson, 2011).

**Applied Positive Psychology.** Applied positive psychology (APP), meanwhile, is centered in the United Kingdom and led by scholars Alex Linley and Susan Harrington of the University of Leicester (Linley et al., 2013b). The APP founders come from a background of practice in the field of occupational psychology (Garcea, Harrington, & Linley, 2013). APP revolves around the term *abundance* as the target of its positive organizational approach, and it has a strong focus on field application of positive organizational methods. APP applies many of the theories and methods of the other groups mentioned here, as well as their own innovations and experience (Linley, Harrington, & Garcea, 2013a). The group feels the demand and need of organizations for positive approaches is too great to await final academic blessing: “Unbound by academic politesse or the demands of research journal gatekeepers, organizations are interested only in answering a single, simple, powerful, effective question: *What works*” (Linley et al.,

2013a, p. 6)? APP contends that managers intuitively feel that positive applications are the right thing to do, and that they are a win-win for the workforce and the organization (Garcea et al., 2013).

**Positive Organizational Scholarship.** Positive organizational scholarship's (POS) origin is associated with the University of Michigan and is most closely aligned with the traditional field of organizational development. In 2001, inspired by the rise of positive psychology, three professors at the University of Michigan – Jane Dutton, studying individual and organizational compassion; Kim Cameron, studying organizational forgiveness; and Robert Quinn, investigating positive personal change – joined together to collaborate on organizational phenomenon of a positive nature (Cameron & Spreitzer, 2012a). POS also projects itself as an umbrella discipline with a wide range of topic-coverage of positive organizational study. When describing the field, POS articles (Cameron, Dutton, & Quinn, 2003a; Cameron & Spreitzer, 2012a; Spreitzer & Cameron, 2012) tend to include run-on lists of congruous examples and targets of study in lieu of a formal definition, as in:

[positive] organizational scholarship focuses attention on the generative dynamics in organizations that lead to the development of human strength, foster resiliency in employees, enable healing and restoration, and cultivate extraordinary individual and organizational performance. POS emphasizes what elevates individuals and organizations (in addition to what challenges them), what goes right in organizations (in addition to what goes wrong), what is life-giving (in addition to what is problematic or life-depleting), what is experienced as good (in addition to what is objectionable), and what is inspiring (in addition to what is difficult or arduous). While note [*sic*] ignoring dysfunctional or typical patterns of

behavior, examines the enablers, motivations, and effects associated with remarkably positive phenomena—how they are facilitated, why they work, how they can be identified, and how organizations can capitalize on them. (Cameron & Spreitzer, 2012a, p. 1)

Cameron et al. (2003a) provide a listing of positive dynamics as the focus of POS – “excellence, thriving, flourishing, abundance, resilience, and virtuousness” (p. 4) – that are similar to those associated with positive psychology. In the final chapter of the same collection, the discipline of POS is described as “an invitation to investigate, in rigorous, systematic, and enlivening ways, the phenomena that are associated with flourishing, vitality, virtue, meaning, and life-giving dynamics.” (Cameron, Dutton, Quinn, & Wrzesniewski, 2003, p. 270). The inclusive invitation appears to have been accepted. The *Oxford Handbook of Positive Organizational Scholarship*, published nine years later, includes seventy-nine chapters from 157 contributing authors, covering a wide gamut of topics (Cameron & Spreitzer, 2012a). A representative sample of these topics is included in “Appendix B – Representative Sample of Chapter Topics in the *Oxford Handbook of Positive Organizational Scholarship*.”

POS is first focused on the dynamics and processes of organizations, and secondarily on the individuals that make up the organizations (Cameron & Spreitzer, 2012a). The discipline is as dedicated to rigorous scholarship as other groups mentioned here, and with its focus on organizations it encourages investigation outside of the lab. POS embraces mixed methods academic research including experimental, longitudinal, quasi-experimental, and qualitative studies.

POS is not exclusively wed to developmental investigation, and does not insist upon unique innovation. It sees value in recognizing existing successful phenomena, and applying



scholarship to backwards engineer the mechanisms and processes to design theories that might drive the same outcome (Cameron & Spreitzer, 2012a). POS is not dedicated solely to traditional organization-centric measures of success, opting instead to cast a broader net of positive outcomes, including that which might only be positive for the employee (Cameron, et al., 2003a; Cameron & Spreitzer, 2012a).

**Positive Organizational Behavior.** Fred Luthans of the University of Nebraska is generally recognized as the founder and figurehead of positive organizational behavior (POB). In a pair of foundational articles, he relates the details of the beginning of the field (Luthans, 2002a, 2002b). The relationship of positive emotions and feelings to performance shared an important place in early study of organizational behavior (OB). As with psychology, though, by the end of the last century, much of OB had given way to deficit analysis of workplace dysfunction and problems (Luthans, 2002a, 2002b). Examples of the state of OB's predominate reductionist approach included "the search for better ways to motivate and lead marginal, inert employees; correct deficient styles, skills and abilities; improve dysfunctional attitudes and behaviors such as resistance to change; and more effectively manage conflict and cope with stress and burnout" (Luthans, 2002b, p. 57). Luthans and other OB academic researchers also witnessed with skepticism and displeasure as a proliferation of popular books addressing OB management advice (but without OB's theory and research grounding) became best-sellers. As these conditions arose, the connection between the academic world of OB and its application in the real world was increasingly tenuous.

As an outside senior researcher with the Gallup Organization, Luthans was exposed to the academic rigor and work of the contributors to the new field of positive psychology. Gallup and Don Clifton, its CEO, were early supporters of the nascent positive psychology movement, and

Luthans was invited to participate in some of the inaugural conferences for the field. The confluence of these events created a “eureka” moment for Luthans, who conceived that he could apply the same positive, research-grounded topics in his own field of OB (Luthans, 2002a).

“This positive psychology movement seemed to have considerable relevance to the workplace and potentially may have the type of commonsense appeal that the best-sellers were having in the professional management marketplace of ideas and possible solutions to current challenges” (Luthans, 2002a, p. 696).

**Definition and focus.** Luthans (2002b, p. 59) defined POB as “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace.” Luthans also stated that the areas of study in POB should also be unique and new to OB (Luthans, 2002a). In his earliest paper, Luthans (2002b) proposed confidence, hope, optimism, subjective well-being, and emotional intelligence (CHOSE) as the original qualifying targets of study for POB. However, he soon thereafter settled on hope, efficacy, resilience, and optimism (HERO) as well-known and critically studied psychological resources from positive psychology (Luthans, 2002a, 2002b; Luthans, Youssef-Morgan, & Avolio, 2015). The selection of these particular topics was based on this final set of criteria:

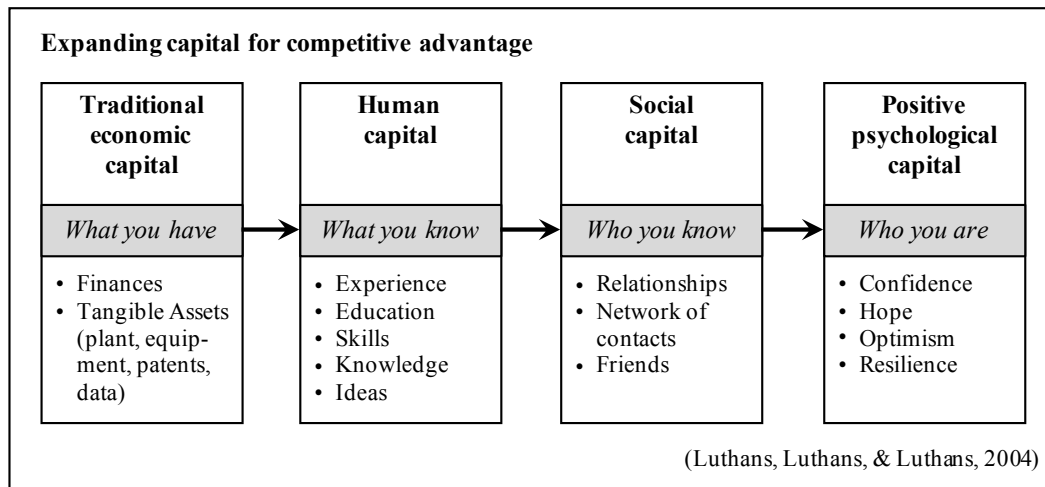
Our scientific criteria for the psychological resources that we specifically used for inclusion in PsyCap [are] (1) being based on theory and research; (2) having valid measurement; (3) being state-like (as opposed to dispositional, trait-like) and thus open to change and development; and (4) having a positive impact on desired attitudes, behaviors and, especially, performance. (Luthans et al., 2015, p. ix)

***Psychological capital.*** The combination of the HERO resources is a multidimensional construct referred to as psychological capital (PsyCap), which is defined as:

An individual's positive psychological state of development that is characterized by: (1) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success. (Luthans et al., 2015, p. 2)

Psychological capital is proposed as a next-generation extension of the resource-based view of competitive advantage. The traditional focus of competitive advantage has heavily favored a firm's assets, *what you have*. Advances in human resource management have shifted the spotlight to human capital, *what you know*, and social capital, *who you know*. Psychological capital represents, *who you are*. Due to PsyCap's dynamic mechanisms, it also represents, *who you are capable of becoming*. This progression of competitive resources is depicted in Figure 1 below (Luthans, Luthans, & Luthans, 2004; Luthans et al., 2015). Human and social capital have become popular due to their unique and non-reproducible nature, but they are fairly static. PsyCap, human capital and social capital interact dynamically to generate enhanced realization of human potential. The aggregate PsyCap of a firm's members will inform how adaptable it will be in today's fast changing markets (Luthans et al., 2004; Luthans et al., 2015).

Figure 1



**POB Criteria.** Descriptions of the inclusion criteria for POB are expanded upon and discussed in the paragraphs below.

*Positivity.* Similar to the prominence of the deficit and disease model in psychology, organizational scholarship and practices had become negatively oriented and focused on resolving issues of ineffectiveness, abusive and unethical behavior, stress, burnout, dysfunction, and counterproductive organizational models (Luthans et al., 2015, p. 27). Standing on the shoulders of POS, which calls for studying and explaining mechanisms which cause exceptional positive behaviors and outcomes (Cameron, 2008; Cameron & Caza, 2004; Cameron et al., 2003a), POB defines positivity as an, “integrated system of antecedents, processes, practices and outcomes that can be readily identified and agreed upon by diverse observers and stakeholders as uniquely surpassing standards of adequate functioning and adding sustainable value to both the individual and the context” (Youssef-Morgan & Luthans, 2013, p. 149).

*Measurement and theory/research-based.* The roots of OB had always grown within a strong foundation of scientific research and the shift to the positive in POB embraced this tradition by targeting human strengths and resources that are validly measurable. The goal of

POB is to create a meaningful and useful body of knowledge for performance management that is pursued with a scientific approach (Luthans et al., 2015).

*State-like, developable.* A stated purpose of POB is to study and create positive solutions that can migrate from the academic environment to organizational domains (Luthans et al., 2015). Luthans (2002b) determined that the new field would be unsatisfied with research and discovery regarding hard-wired individual traits, which may be valuable for prediction but offer limited practical value beyond selection, retention, and assignment. The criterion to include only psychological characteristics that were malleable and developable was included to create a field of study that would allow training and improvement of most employees and leaders (Luthans et al., 2015).

POB espouses that the potential for human development is elastic (Luthans et al., 2015). It also includes the belief that there is not a dichotomous model of states and traits. Rather, there is a continuum representing state-like and trait-like positive psychological resources, and to varying degrees, a particular resource may exhibit both state-like and trait-like characteristics (Luthans, Avolio, Avey, & Norman, 2007; Luthans & Youssef, 2007). The concept of the state-like, trait-like continuum is shown in Figure 2 below (Luthans et al., 2015):

Figure 2

<b>Positive STATES</b>	<b>"State-Like"</b>	<b>"Trait-Like"</b>	<b>Positive TRAITS</b>
Our momentary moods and feelings	Our PsyCap	Our personalities and strengths	Our "hard-wiring"
(Very difficult to get sustained change and development)	(Open to change and development)	(Difficult to change and development in adults. Need to select and/or fit the	(Extremely difficult to change and development)
An evidence based continuum of PsyCap change and development (Luthans et al., 2015).			

*Performance.* POB's performance criterion is a matter of practicality and market reality. The desire is for POB theories and practices to be adopted for use by real world organizations. There are limited resources of time, effort, and money available for the many projects that organizations will decide to pursue. POB scholars recognize that they are competing with other choices for allocation of these resources. Requiring that its studies involve a performance aspect provides the field with a leg up in its competitive positioning with business decision makers. To date, there are multiple studies that have shown PsyCap's relationship to improved performance, which are enumerated in a meta-analysis and a literature review (Avey, Reichard, Luthans, & Mhatre, 2011; Newman, Ucbasaran, Zhu, & Hirst, 2014).

**Summary.** This section reviewed how, in the footsteps of positive psychology, several traditional fields in management and organizational sciences launched shifts to the positive. Much of the work has been a redesign of positive psychology methods and theories for use within organizations, and similar to positive psychology, there are a variety of approaches with the common goal of enhancing human flourishing through organizational design and behavior.

## **Part I Conclusion**

Returning to one of the central questions of this paper, has positive psychology failed to gain traction in businesses because of a lack of sufficiently strong research? The preceding reviews of the growth of positive psychology scholarship – including a number of related or sub-disciplines specifically focused on organizations – shows that there has certainly been a rapid and substantial growth in academic interest in these areas. There is a large body of high-quality, peer-reviewed research and a broad following in academia for positive psychology concepts targeting organizations. While there may not be (at least to my knowledge) a single “gold-standard” study that definitively links increased well-being to increased performance, the weight of supportive research and contributing concepts developed in only a decade is beyond impressive. Further, much of this research has been designed with application in mind. The second question identified at the start of this paper is whether the research of positive psychology is relevant to the interests of business leaders. Here again, this preliminary review of the research suggests that at least for some scholars in this field, ensuring organizational relevance is an important part of their choice of topics to study. Both APP and POB have explicitly stated an emphasis on studying actionable, relevant constructs. Other areas of positive psychology are more implicitly relevant, while others may in fact be irrelevant to business leaders.

While this review has been helpful in understanding the lay of the research land, it is one thing to consider questions of rigor and relevance on paper, but another to consider them in the real world. Moving beyond this initial review of the research, then, let us now turn to organizational leaders themselves to better understand the view from their perspective.

## **Part II: Executive Views on Positive Psychology**

### **Introduction and Background**

To investigate these issues further, I initiated a qualitative study involving direct interviews with senior executives of various corporations. This study is designed as a general inquiry and discovery regarding whether there is a potential disconnect between positive psychology, POB, POS, etc., and the acceptance and application of the same in the “real world.” And, if so, what are the contributing factors to these circumstances? This study does not seek definitive proof or solutions, but to identify fertile themes for further investigation. For this reason, the study is designed as an informal qualitative examination of the thoughts and opinions of a selected group of U.S. corporate executives. This inquiry is meant to uncover how aware the executives are of the advancements in positive psychology and positive organizational studies, the level of general interest in and acceptance of positive approaches, the types of evidence used in making workforce change decisions, and the reliance upon academic scholarship and empirical research for such decisions.

### **Method**

The method of data collection involved direct qualitative interviews / discussions with a selection of senior executive officers of corporations. Qualitative analysis is an exercise in making sense of data that cannot be subjected to mathematical manipulation, and is most helpful in exploratory stages of developing theory (Mohrman, Gibson, & Morhman, 2001). Staw (1995) notes that qualitative studies permit the opportunity to make multiple observations that might lead to multiple theory-building opportunities.

The selection of participants was limited to persons that currently hold or recently held the position of Chief Operating Officer, President, or Chief Executive Officer. Due to my interest



in company-wide implementations of positive psychology methods, and my belief that this requires a cultural shift within organizations and full buy-in from the C-suite, I excluded approaching human resource officers. Each of the interviews was conducted by me over the phone, except for one that was conducted in person. The participants received an advance copy of the sample question guide included in “Appendix C – Sample Question Guide for Executive Interviews.” However, each of them admitted to having spent little time reviewing the questions. A sample of the types of questions asked during the interviews are:

- Please describe your general knowledge about or exposure to the methods of positive psychology.
- Do you believe it is possible to enhance well-being and in turn improve performance with positive psychology methods?
- Can you characterize the difference between positive psychology and popular management and self-help books?
- Do you believe U.S. companies have a moral obligation to enhance employee well-being without regard to any subsequent benefit to the company?
- And, what types of evidence do you consider most important in making business decisions in general and specifically regarding the workforce?

The interviews ranged in length from 35 – 50 minutes. The interviews were casual, informal discussions; the script and order of the questions varied from interview to interview, and in some cases, not all questions were covered. However, unless otherwise noted, any critical universal observation detailed in the analysis section was based on a response from each of the participants. Due to the interest of the participants in positive management approaches, a portion of time during each interview involved providing information to the participant in response to

questions. In some cases, nearly one half of the interview time involved informative discussion about various positive topics.

The senior executives were recruited through direct outreach, and each of the participants is known to me socially or socially/commercially. All of the executives invited agreed to participate. To avoid potential conflict of interest, I specifically excluded CEO's and other executives who have worked for me as a member of one of my current or former portfolio companies. The use of convenience sampling means that there is little likelihood that this sample of participants fairly represents the full population of senior executives. However, the companies represented by the executives in this study do represent a cross-section of various industries, organization sizes, and locations throughout the eastern United States.

The executives ( $n = 12$ ) represent U.S. companies that are of various sizes: 100-500 employees ( $n = 5$ ), 1,000-5,000 employees ( $n = 3$ ), 5,000-10,000 ( $n = 2$ ), and 50,000-plus employees ( $n = 2$ ). The companies represented also cover a wide variety of industries: marketing, real estate, telecom, software, retail, construction engineering, chemicals production, manufacturing, electronics manufacturing and systems, multi-national law firm, and an airline. All but one of the executives are Caucasian males in their fifties; the one exception is an Asian female in her fifties. Two of the participants are classmates in the MAPP program.

For added color, I also engaged in abbreviated interviews with two executives whose roles do not meet the position requirements described above and a head coach and assistant head coach of a professional sports team. The two managers are both technically and educationally trained as scientists, but have been promoted to commercial and strategic positions with a large bio-tech company. I discussed some of the questions with them due to their training in hard sciences and the scientific method to investigate if their views might differ from the principal

subjects. I spoke with the coaches due to the high level of interest in athletics for positive psychology, and my belief that many management processes are similar to team sports activity. (These four abbreviated interviews are not included in the ( $n = 12$ ) sample, and except where noted otherwise, their results are excluded from the discussion.)

## **Discussion**

Although this study has a relatively low number of participants, and despite the qualitative design of the study, the near unanimous consistency of responses in several areas of questioning provides interesting directional information.

**Relevance of positive psychology.** Outside of the two executives who are also enrolled in MAPP, there was scant awareness about the field of positive psychology among the other participants. To the extent the participants were aware of the existence of positive psychology, each of them admitted it was solely due to their knowledge of my enrollment in MAPP. Not surprisingly, given the limited knowledge of the existence of the discipline, none of the subjects were able to describe differences between positive psychology and self-help and popular management books. Notably, none could identify academic rigor as a foundation of positive psychology.

I asked specifically about knowledge of PsyCap, which as will be discussed later strikes me as one of the most business-ready constructs from positive psychology. Again, given the lack of knowledge about positive psychology generally, none of the participants recalled ever hearing of PsyCap specifically. After presenting to them the constituent components of the construct, most were interested to know more, but still admitted to no prior knowledge.

Despite the limited knowledge of the formal field of study in positive psychology, though, all of the participants held a strong belief in, and inclination towards, positively directed

management methods. All of the subjects believe that well-being can be intentionally enhanced in the workplace, and that a workforce with higher well-being will perform better, improving the organization's results. The concept of positively impacting their employees' well-being, with its attendant benefits, resonated strongly with each of them. To at least some extent, each of the subjects utilizes positive techniques in their business. Several of the participants discussed methods of creating community and involvement for their companies' employees through authentic recognition and purposefully seeking continual input. The most striking example of a participant using positive techniques without connecting them to positive psychology came half-way through an interview. After stating that he had no exposure to positive psychology early in the interview, he later revealed that he had become a certified StrengthsFinder trainer at his church, and that he was now utilizing those skills for his workforce.

An interesting combination of responses during the interviews emanated from the question as to whether U.S. companies had a moral obligation to provide enhanced well-being for their workforce, without regard for or consideration of the potential benefit for the organization. In other words, is their interest in the positive driven by an intrinsic motivation to do the right thing or by a belief that the positive is worthwhile because (and only if) it will lead to better business outcomes? Most of the respondents had difficulty formulating an answer to this question because they struggled to separate themselves from a foundational, personal belief that positive approaches would always be beneficial for both employees and the organization. Thus, while many initially answered yes to this question, closer scrutiny of the reasoning revealed that the answer was, at least in part, related to the benefit that would accrue to the organization. Others seemed to want to answer yes, reflecting their personal beneficence toward people, but struggled with the tension of whether the businesses have such a moral obligation. One

respondent believed improving workforce well-being to be a good thing, but mentioned that he believed that companies involving themselves in “social construction” might be entering a slippery slope of consequences. Three respondents stated explicitly that irrespective of benefit to the business, organizations should be morally obligated to improve well-being. However, upon closer inspection, they each admitted that their answer did not involve the company, a morality, or an obligation. They each realized that their answer was premised on the personal satisfaction and meaning they create for themselves by making a positive difference for the employees under their care.

In sum, then, based on this sample of executives at least, it appears that Seligman’s assessment that positive psychology has yet to be taken up by businesses is likely accurate. These executives at least are largely not familiar with the field. However, these interviews suggest that the lack of uptake is not due to a lack of openness or interest. These executives expressed a clear belief in the value of the topics of study in positive psychology, although it’s not clear whether they believe that to be true even if or when positive psychology might not benefit their businesses. Nevertheless, they all reported using similar techniques to those studied in positive psychology to at least some extent, even if they were not drawn from research.

**Rigor.** While the executives were unanimous in saying that yes, positive topics and approaches are relevant to their interests, the question remained whether they would be convinced of the rigor of research done to date. Were they merely waiting for a “gold-standard” study? The answers were once again unanimous, but this time it was a very clear, “No.”

When asked which was more useful and valuable when making business decisions – the supporting academic research and empirical studies or intuitive reasoning – the executives came down squarely on the side of intuitive reasoning. This is not to suggest that the participants are

dismissive of the value of academic research, but rather that it seems best used in theory-development and sense-making. In general, the participants do not feel that academic research is generally available for, or usable in, practical application. Interestingly, in response to this question, even the scientifically trained managers from the bio-tech firm held a similar opinion as the others regarding limited reliance on academic research to support management decisions.

To further explore this point, each subject was asked to recount specific examples in which they had relied upon academic research in determining a business decision; most respondents could think of no such instance. Among those that could, with further investigation, the examples were determined to have been from the use of empirical analysis and data that was, in fact, commercially developed information. The single closest instance of the use of academic research was in the second order, involving the reliance on commercially created information that cited references to academic research.

Although these executives reported a lack of reliance on formal academic research, they did indicate an appreciation for rigorous analysis of their own data, particularly in the area of understanding the drivers of performance. Each of the subjects responded that performance measurement entails a heavy dose of quantitative measures that relate input to output, and these measures are specifically designed to fit the particulars of how their businesses operate. Several also mentioned the use of qualitative measures and surveys, but as with the quantitative methods, these were specifically designed to fit the extant circumstances of their particular business.

When it comes to rigor, then, it seems from this sample of executives at least that Seligman's hypothesis that a more academically rigorous study is needed proves false. These executives have not evaluated the existing research and found it lacking; they have not even looked at the existing research because they generally do not recognize it as useful for informing

their decision-making. What is more important to them when it comes to data and analysis is that the measures used are tailored to the specific circumstances of their industry and organization.

(For additional reports from these surveys, see Appendix D – Additional Findings from Executive Interviews.)

## **Conclusion**

This study, though very limited, provides a preliminary indication that there is a great demand for positive applications for businesses, and that such initiatives are believed to create a win-win scenario for the workforce and the organization. Based on these interviews, one could surmise that the corporate world 1) has or is prepared to embrace the positive, 2) believes that workforce well-being and performance can be enhanced together, 3) is generally unaware of academic advances in the positive, and 4) is not heavily dependent on the academic world as a primary resource in making business decisions.

Although there appear to be few positive approaches in application that are directly influenced by the field of positive psychology or its adjunct fields focusing on positive psychology for organizations, the results of the interviews indicate that the cause is not a lack of interest on the part of business, nor the absence of sufficiently rigorous research results on the part of academia. On the contrary, the interview results suggest, as APP scholars have noted, the organizational demand for positive approaches is great (Linley et al., 2013a). And as the first part of this paper demonstrated, there is a substantial body of existing relevant research available. Closing the gap between positive psychology research and organizational practice, then, is a matter of matching the *right product* (area of research) with the *right consumer* (executives already interested in the positive). Part III of this paper proposes that PsyCap, a highly developed

and well researched positive construct that has been designed with business organizations in mind, represents an example of the *right product*.

### **Part III: A Closer Look at PsyCap**

PsyCap is a latent, higher-order multidimensional construct comprising hope, optimism, resilience, and efficacy. As mentioned in Part I, PsyCap emerged from the field of positive organizational behavior (POB) as a framework for identifying malleable positive constructs that could stand up to the rigors of academic measurement *and* predict business outcomes like performance that are relevant to organizational leaders. In other words, PsyCap was developed with the goal of closing the gap that has been discussed throughout this paper. As this section will demonstrate, however, although PsyCap has all the makings of a great positive psychology product for the business world, it still has yet to actually break through and achieve common usage.

#### **Rigor**

Referring to earlier discussion, scholars in POB identified as inclusion criteria for their topics of focus that they be positive, theory- and research-grounded, validly measurable, state-like characteristics that have a desired impact on performance (Luthans et al., 2015). A review of relevant psychological and organizational behavior research revealed that four psychological resources meet those qualifications: hope, efficacy, resilience, and optimism. All four of these constructs, as shown below, have a strong body of prior research to support them and are validly measurable, both independently and as part of the larger PsyCap construct.

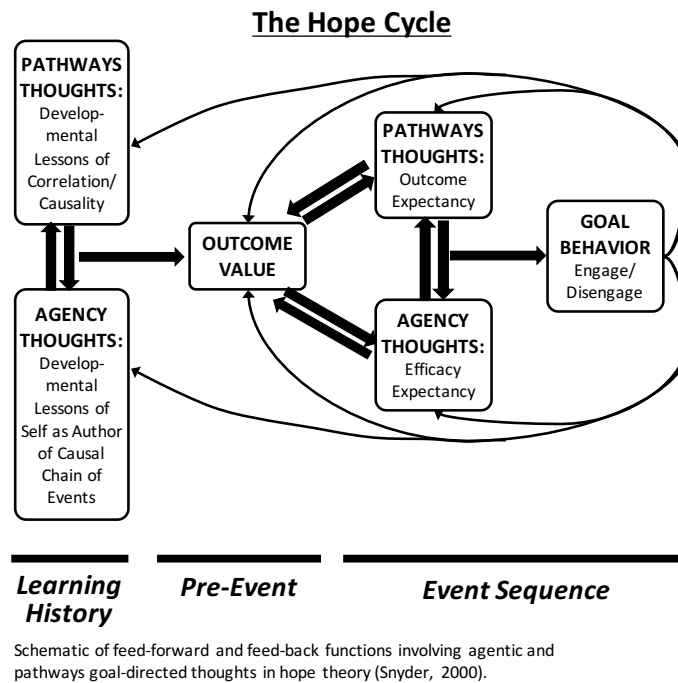
**Hope.** Like many concepts, hope has a specific meaning and definition in the field of positive psychology that is different than common usage of the word hope. Hope as a scientific construct does not mean wishful thinking for the future (Lopez, 2013), which is what many



might think of when they hear that word. Snyder, the most widely recognized contributor to the creation and development of hope theory, offers the two following definitions for the hope construct: “a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy) and (b) pathways (planning to meet goals)” (Snyder, Irving, & Anderson, 1991, p. 287, as cited in Snyder, 2000, p. 8), and “a cognitive set that is based on a reciprocally-derived sense of successful agency (goal-directed determination) and pathways (planning to meet goals)” (Snyder et al., 1991, p. 571, as cited in Snyder, 2000, pp. 8-9).

According to both definitions, the primary active ingredients in hope theory are agency and pathways. Importantly, both of these ingredients are directed toward implicit and intentional goals. Snyder’s (2000) hope comprises both cognitive assessment and purposeful action toward a set goal. Agency is the *willpower* to direct energy toward challenging goals or situations. Pathways, the *waypower*, is the active and prospective production of alternative routes to reach a certain goal. Specifically, pathways predict potential obstacles or blockages to the original route and proscribe an alternative path in avoidance of such inhibitors (Luthans et al., 2015; Snyder, 2000). An important aspect of agency and pathways is the iterative interaction promoting synergistic reaction, leading to an upward spiral of hope competence. Willpower motivates a search for pathways and waypower provides a sense of competence and control that encourages agency (Lopez, 2013, Luthans et al., 2015; Snyder, 2000). Snyder (2000) refers to this iteration as the hope cycle, and this model is portrayed in more detail in Figure 3 below:

Figure 3



Hope can be developed in the workplace by supporting the essential ingredients of goals, agency and pathways. A nonexclusive list of methods for successful hope development include (Luthans et al., 2015, pp. 86-91):

- Goal setting – Setting goals and internalizing commitment with self-regulated progress toward achievement (Locke & Latham, 2006; Lopez, 2013);
- Stretch goals – Setting specific goals that are both challenging and achievable;
- Approach goals – Setting goals where the introduction of positive action, rather than negative action, creates and represents progress toward the goal, and can be celebrated (avoidance goals invoke certain fight or flight responses and influence motivators in a different manner);
- Stepping – Breaking down large, seemingly overwhelming goals, into logical and manageable steps that can approached with confidence;

- Mental rehearsing – Similar to visualization, mental rehearsing allows for preparation and virtual practice for achieving targeted goals or sub-goals, particularly useful in imagining obstacles and then the potential revised pathways in response.

**Efficacy.** Self-efficacy is the cognitive resource capacity that creates the motivation to act, stemming from our beliefs and perceptions regarding the probability that we will be successful (Luthans et al., 2015). The definition of self-efficacy as a component of PsyCap is broad: “Self-efficacy refers to an individual’s conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and course of action needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998b, p. 66).

Self-efficacy represents the assurance with which one addresses a task and can greatly influence how well one uses their existing skills and resources. Self-doubt can override a fully competent complement of capabilities (Bandura, 1997). Rarely in life is one situation the same as another set of circumstances, and the adaptive functioning of self-efficacy allows generative approaches, permitting one to access different skills and competencies in myriad combinations in response to the situation at hand.

...efficacy is a generative capability in which cognitive, social, emotional, and behavioral sub-skills must be organized and effectively orchestrated to serve innumerable purposes. There is a marked difference between possessing sub-skills and being able to integrate them into appropriate courses of action and to execute them well under difficult circumstances. (Bandura, 1997, pp. 36-37)

Self-efficacy has more to do with how you coordinate skills in response to varying circumstances than the quantity and level of skills possessed. Importantly, both the definition used in PsyCap and Bandura’s earlier work on self-efficacy theory emphasize that self-efficacy

is tied to a specific context. “Personal efficacy is not a contextless global disposition assayed by an omnibus test. Rather it is a multifaceted phenomenon. A high sense of efficacy in one activity domain is not necessarily accompanied by high self-efficacy in other realms” (Bandura, 1997, p. 42).

Bandura (1997, ch. 3) presents the following manners of developing self-efficacy (in a declining hierarchy of effectiveness):

- Enactive mastery experiences – Successful experiences in overcoming obstacles with perseverance and skills. This involves not only success, but also how one interprets success; it must be perceived as being earned.
- Vicarious experiences – Creating self-efficacy by watching others modeling successful behavior is particularly effective for experiences which are not easily measured and compared. The productiveness of the cognitive process of witnessing another’s success is influenced by how familiar the task, situation, and model are to the participant.
- Social persuasion – Encouragement and faith from others that are significant to us can provide a boost of self-efficacy.
- Physiological and affective states – This fourth source acts as a moderator of efficacy. Negative arousal states and adverse thoughts will temporarily interfere with available levels of self-efficacy. Whereas positive psychological states can enhance one’s cognitive function, thereby temporarily enabling higher self-efficacy.

There is substantial scholarly research establishing the correlation of efficacy and work performance. Stajkovic and Luthans (1998a) completed a meta-analysis of the relationship

between efficacy and work-related performance, establishing a strong relationship between the two.

**Resilience.** While there are many definitions of resilience, the PsyCap definition is, “the capacity to rebound or bounce back from adversity, conflict, failure, or even positive event, progress, and increased responsibility” (Luthans et al., 2015, pp. 144-145). Other organizational scholars offer this similar workplace definition: “...a developmental trajectory characterized by demonstrated competence in the face of, and professional growth after, experiences of adversity in the workplace” (Caza & Milton, 2012, p. 896). These definitions both include adaptation and growth in response to adversity, which may be manifested psychologically, behaviorally, or affectively (Caza & Milton, 2012; Luthans et al., 2015). The psychological facet enables maintenance of well-being and mental health, and the behavioral facet enables effective focus on relevant tasks and goals (Robertson & Cooper, 2013). As noted in the definition above, PsyCap also recognizes the usefulness of resilience in positive, yet challenging, circumstances.

Resilience is different from the other components of PsyCap, as its primary function is to provide a positive reaction to external circumstances, rather than proactively seeking control of a particular outcome. In this way it is most similar to the explanatory style aspect of optimism, which is a reaction to past events. In fact, explanatory style is one process of enacting resilience.

Ann Masten, a leading researcher in resilience suggest that resilience is available to all people, and can be nurtured and developed by addressing everyday skills and psychological resources (in Luthans et al., 2015; Masten, 2001; Masten, Cutuli, Herbers, & Reed, 2009). Masten (2001) characterizes resilience as *ordinary magic*. Reivich and Shatté (2002) state that resilience is not genetically fixed, and neither are there individual limits to how much resilience one can develop. Developing and exercising higher levels of resilience is essential to happiness

and success. And everyone can increase their present levels of resilience (Reivich & Shatté, 2002). Masten et al. (2009) present a model of interaction between resilience assets and resilience risk factors, in which resilience assets are brought to bear in a manner to overcome or defeat resilience risk factors. Resilience risk factors can include the absence of certain assets as well as the presence of specific risks factors.

Resilience can be developed through a demonstrated adaption to the presence of adversity or challenge, which leads to subsequent growth (Luthans et al., 2015). Development of resilience grows from challenge and adversity. If a positive or negative event pushes a person beyond a certain capacity threshold, to a point of reasonable discomfort, they will access their available resilience resources and exercise them (Luthans et al., 2015). This model resembles the activation of optimal psychic order (flow) in which a person's involvement with an activity stretches just beyond their capabilities, creating an intense focus of attention on the task with no conscious distraction (Csikszentmihalyi, 1990).

Resilience can also be developed proactively (Luthans, Vogelgesang, & Lester, 2006). One model of proactive development, proposed by Masten et al (2009), involves strategies that work to influence contributing factors to resilience. These include:

- Asset-focused strategies – These strategies involve the strengthening of resilience assets. Resilience assets include human and social capital, as well as the other constituent components of PsyCap – hope, efficacy, and optimism (Luthans et al., 2015).
- Risk-focused strategies – These techniques, focused on risk, take aim at reducing exposure to risks, and are in essence avoidance strategies that reduce the need for resilience. Thus, such strategies do not increase resilience per se in individuals. Given

the ubiquitous presence of risk and adversity in business environments, this is a less advantages approach in the workplace (Luthans et al., 2015).

- Process-focused strategies – These strategies work on developing and enabling cognitive approaches to adversity, and resemble methods taught in cognitive therapy, such as understanding how thoughts drive emotions and reactions, paying attention to patterns in thinking, and taking opportunities to reframe situations or put them in perspective (Reivich & Shatté, 2002).

The Penn Resilience Program, developed at the University of Pennsylvania, was later adapted to create a Master Resilience Training program for the U. S. Army (Reivich, Seligman, & McBride, 2011). The focus of these programs involve asset-focused and process-focused techniques to increase resilience in individuals. The asset-focused approaches work to enhance factors such as optimism, problem-solving, self-efficacy, self-regulation, emotional awareness, flexibility, empathy, and relationships. The process-focused techniques are cognitive approaches primarily built around an *adversity-belief-consequences* model. This model posits that a person's beliefs about an adversity or events directly drives behavioral responses and emotional reactions to the event. Training involves skills in recognition, monitoring, and evaluating their beliefs to improve accuracy (Reivich et al., 2011; Reivich & Shatté, 2002). It is during this aspect of resilience development that utilizes training in explanatory style.

**Optimism.** Beyond the borders of the field of positive psychology, optimism is a very misunderstood psychological resource. Many scholars and other individuals consider optimism to be an unrealistic, false view of the world, in which optimists trade for irrational illusions, causing them to forego accurate perception and realistic acknowledgement. However, optimism properly applied is highly rational (Luthans et al., 2015). Optimism is known to be related to

many positive outcomes (Carver, Scheier, Miller, & Fulford, 2009; Peterson & Steen, 2009).

Optimists are not happier and more successful because of their cheery dispositions, it is because they utilize different coping mechanisms. Rather than stewing in negativity, they keep trying, and maintain a problem-solving focus. Optimists accept uncontrollable realities, while concentrating their energies on circumstances that they can positively influence (Luthans et al., 2015).

PsyCap embraces two different forms of optimism: global positive expectations and explanatory, or attributional, style (Luthans et al., 2015). Global positive expectations focus on expectations for the future, linked to expectancy-value models of motivation (Carver et al., 2009). The more important, desirable, and *valuable* a goal is to a person, the more they will direct their behaviors and energy toward that goal. *Expectancy* is influenced by a person's confidence that they can attain the goal. High expectation infers high confidence, leading to greater perseverance and effort (Carver, et al., 2009). General expectancies are forward-looking and pertain to most domains of a person's life.

Explanatory style, by contrast, is a backwards-looking review of past events. Explanatory style is closely aligned with Seligman's (1998) theory of learned helplessness, which arose from studies in which he noted that two-thirds of subjects would, in essence, give up and no longer resist the adversity. It was during the examination of the results regarding the one-third that did not give in, no matter the adversity, that the concept of optimism as an explanatory style was developed (Peterson & Steen, 2009; Seligman, 1998). Explanatory style involves three dimensions of how people describe the causes of good and bad events: *permanence*, *pervasiveness*, and *personalization*. *Permanence* describes the temporal attitude toward adversity. *Pervasiveness* embraces space and volume; it determines how broadly negative or



positive events affect additional life domains. And *personalization* pertains to who one believes is responsible for positive and negative events. In brief, someone with an optimistic explanatory style maintains the following explanation of adversity, “It’s going away quickly, I can do something about it, and it’s just this one situation” (Seligman, 2011, p. 189), whereas a pessimist would believe the opposite. When it comes to good events, their roles reverse and the pessimist tends to think the good fortune will be short-lived, is out of their control, and will not help them much in other areas.

In PsyCap, optimism is conditioned upon being flexible and realistic (Luthans et al., 2015). Aristotle (in Melchert, 2002) preached finding the golden mean of applying virtues, and that at each end of virtue is vice. Today this sentiment is often presented as the inverted u-curve (Grant & Schwartz, 2011). Many characteristics and resources improve outcomes only to a certain point, beyond which they begin to create diminishing, and eventually negative, returns. A realistic and flexible optimist accepts the reality of uncontrollable adversity, and focuses energy in areas where it will make a difference to the outcome (Luthans et al., 2015). Common cognitive biases tend to overweight the negative of circumstances. Approaching reality with an optimistic disposition helps cancel out the excessive negative, and nets to results that can be a more accurate interpretation of reality (Luthans et al., 2015).

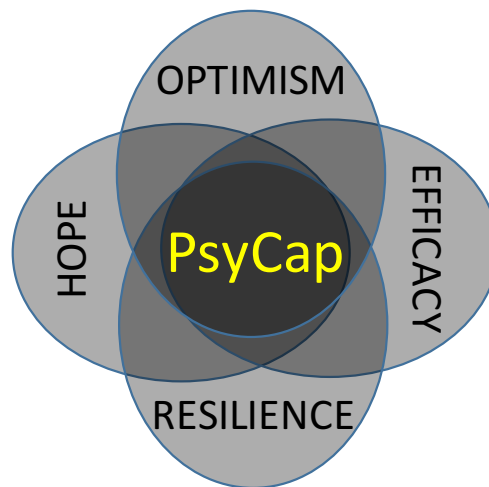
**Elevating interaction among the components.** Each of the components of PsyCap qualified against the inclusion criteria of POB on its individual merits. There was no original design to combine the different resources; it was an unintended discovery that they turned out to be synergistic when combined together (Luthans et al., 2015). The constructs work together in a generative manner, creating an elevating effect in which the whole is greater than the sum of the parts. Luthans et al (2015) offer a fulsome description of the workings of PsyCap,

Hope, efficacy, resilience, and optimism share a first-order internalized sense of agency, control, and intentionality. This agentic and “conative” mechanism (Youssef & Luthans, 2013a, Youssef-Morgan & Luthans, 2013) promotes a positive outlook, selection of challenging goals, and investment of energy and resources in pursuit of those goals despite potential problems, obstacles, and setbacks. This is because circumstances and chances of success are consistently, but realistically, appraised in a positive light. These positive expectancies become powerful driving forces, yielding motivation for resource investment and perseverance toward goal attainment with accompanying desirable attitudes, behaviors, and performance. (p. 30)

There are many ways in which the individual components of PsyCap synergistically support and boost the other components. For example, efficacy is best developed through mastery experiences (Bandura, 1997), resilience promotes persistence, and hope provides alternative pathways, improving chances of success and eventually attaining a mastery experience. The process of overcoming challenges to arrive at success also supports optimism in future challenges (Luthans et al., 2007)

PsyCap and its components have been shown to have discriminant validity and convergent validity (Luthans et al., 2015). A construct such as PsyCap, which is greater than the sum of its parts, is a higher-order abstraction of its dimensions, and is referred to as latent (Law, Wong, & Mobley, 1998). Divergent validity (constrains) and convergent validity (enriches) are terms that mean that PsyCap and its components are each different enough so that they do not measure the same thing (light grey Figure 4 below), while being similar enough that they can create synergy (darker grey Figure 4 below).

Figure 4



**Measurement.** The measurement of PsyCap has been developed by adapting items from the well-recognized and accepted measurements of its individual components (Luthans et al., 2015). The compilation of the separate items results in the twenty-four item Psychological Capital Questionnaire (PCQ-24). The PCQ-24 includes six items each for hope, efficacy, resilience, and optimism, and has also been adapted to a reliable and valid shorter version, the PCQ-12 (Luthans et al., 2015). These measures have been used consistently for nearly fifteen years, and over this time have been shown to be statistically reliable and valid (Avey, et al., 2011; Luthans et al., 2015). Harms and Luthans (2012) have also developed and are further testing use of an implicit PsyCap questionnaire. A critical psychometric review of the measurement of PsyCap resulted in favorable support, but also suggested critical refinement and future direction advice (Dawkins, Martin, Scott, & Sanderson, 2013). The comprehensive review of literature covering sixty-six independent PsyCap studies confirmed that the vast majority of the studies utilized either PCQ-24 or PCQ-12 to measure PsyCap.

**Summary.** This section has shown that PsyCap has been developed from the strength of multiple lines of research and theory, and it is reliably measurable in its own right as a higher-order construct that picks up on the combined benefits of hope, efficacy, resilience, and

optimism. As PsyCap approaches the fifteenth anniversary of its inception, it is clear that the construct has received a great deal of interest and support in the academic world. The breadth of the scholarship driving PsyCap toward maturity is perhaps best captured by two massive analyses: 1) A meta-analysis covering 51 independent quantitative studies (Avey, et al., 2011), and 2) a literature review covering 66 different studies (Newman, et al., 2014).

### **Relevance**

The interviews with senior executives described in Part II showed that business leaders are both open to and interested in positive approaches and constructs, even if they are not yet familiar with research in this area. They generally believed it was worthwhile to attend to and invest in employee well-being, in large part because many of them believe that supporting their employees will in turn support desired business outcomes. In order for PsyCap to be a relevant construct to bring into organizations, then, it should have a clear relationship with well-being *and* performance.

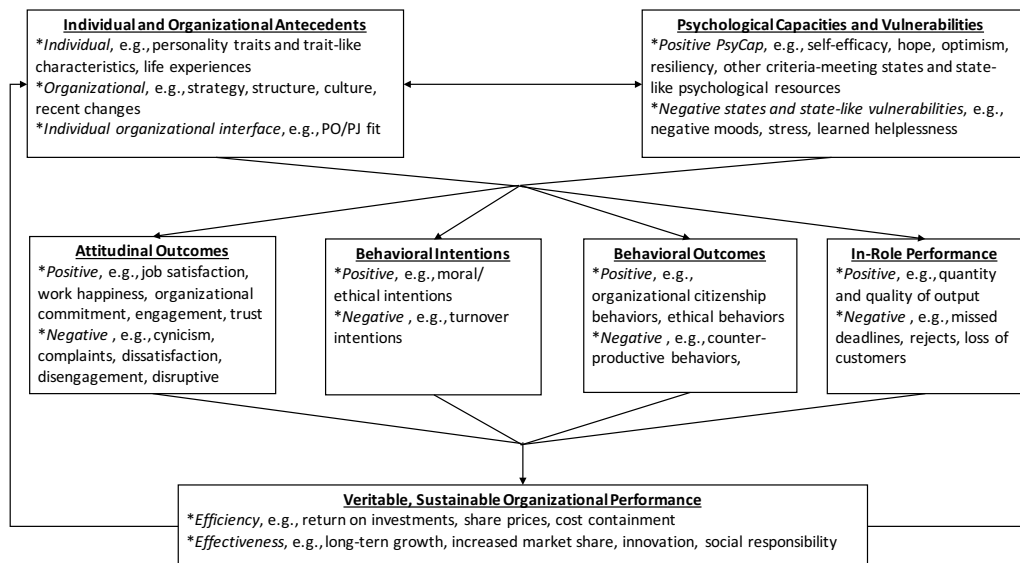
**Well-being outcomes.** Given the positive condition to qualify as a topic of interest to POB, it should follow naturally that PsyCap would contribute to well-being. In developing a conceptual framework for the promotion of well-being from PsyCap, Youssef-Morgan and Luthans (2014, pp. 184-186) offer mechanisms of support for this hypothesis and a model of the relationship:

- 1) Well-being is in part the result of one's cognitive and affective appraisals of life.  
Mechanisms within PsyCap operate to result in multi-faceted positive appraisals.
- 2) PsyCap has been shown to predict satisfaction with life.
- 3) Well-being is thought to be influenced by retained memories. The positivity of  
PsyCap can beneficially affect memory processes.

- 4) Well-being is theorized to include a perception of available resources. PsyCap is a psychological resource.
- 5) PsyCap can help offset and reduce negativity bias.
- 6) The agentic goal pursuit of a variety of goals is an integral part of PsyCap, which can help overcome hedonic adaptation, a detractor from well-being.

Luthans et al (2015) propose a conceptual model in which PsyCap supports the positive to balance the negative (Figure 5 below). The results are multiple positive outcomes and increased performance, which in turn contributes to well-being.

Figure 5



An integrated conceptual framework of positive psychological capital and workplace outcomes (Luthans et al., 2015, p. 281; Youssef & Luthans, 2013b)

Moving from the theoretical to the empirical, PsyCap predicts eudaimonic work well-being, which is significantly associated with positive mood and life satisfaction (Culbertson, Fullagar, & Mills, 2010), is indicated to be related to psychological well-being over time in a longitudinal study (Avey, Luthans, Smith, & Palmer, 2010), has been shown to positively mediate mindfulness and leaders' well-being (Roche, Haar, & Luthans, 2014), and is supported as contributing to thriving at work (Paterson, Luthans, & Jeung, 2014). In sum, if organizational

leaders care about the well-being of their workforce, then PsyCap is clearly relevant to their interests.

**Performance.** Demonstrating a clear relationship between PsyCap and well-being is one step toward proving relevance to business leaders. Given that most of the executives interviewed for this study struggled to separate well-being outcomes from performance outcomes, however, it is also critical to show a relationship between PsyCap and increased performance. As would be expected for a higher order construct whose constituents' conditional qualification includes a relationship to performance, PsyCap has been shown to be significantly related to positive work outcomes (Avey, et al., 2011).

Before looking at the research on PsyCap specifically, consider how each of its four components might contribute to performance.

- Hope, as defined earlier, would rationally and intuitively lead to better workplace performance. A person that has set specific workplace goals and manages both energy and thought into reaching those goals would be expected to succeed more often than those who did not. This has been shown to be true for both athletic and academic achievement, and is logically extended to predict workplace performance, initially supported by preliminary academic studies (Peterson & Byron, 2008).
- PsyCap efficacy provides motivation for one to embrace challenges and then organize and apply competencies and energy to meet or excel in addressing these challenges. It encourages one to energetically direct time and effort in the pursuit of goals. PsyCap efficacy can help you carry-on when obstacles arise, relating efficacy to hope, resilience, and optimism (Luthans et al., 2015, p. 46). Self-efficacious people set high goals, select difficult tasks, thrive on challenges, are highly motivated, invest effort toward their goals,

and persevere in the face of adversity (Luthans et al., 2015, p. 51). It is not difficult to imagine such characteristics contributing to improved self-direction and higher performance.

- The benefits of resilience are supported by decades of research that demonstrate that it is strongly related to satisfaction with life and success in the workplace (Reivich & Shatté, 2002). Resilience paves the way through adversity and against challenges so that other components of PsyCap can shine without distraction. Resilience is particularly vital during times of chaos, which often require speed and decisiveness, enabling flexible, accurate, and thorough thinking (Reivich & Shatté, 2002).
- The workplace is complex and change has become the norm. Given the persistence of uncertainty, in today's environment, a flexible optimist identifies the correct mix of optimism and realism to encourage the best short-term and long-term outcomes. As a result, optimists take command of their future (Luthans et al., 2015).

What happens, then, when these four independent contributors to work performance are combined?

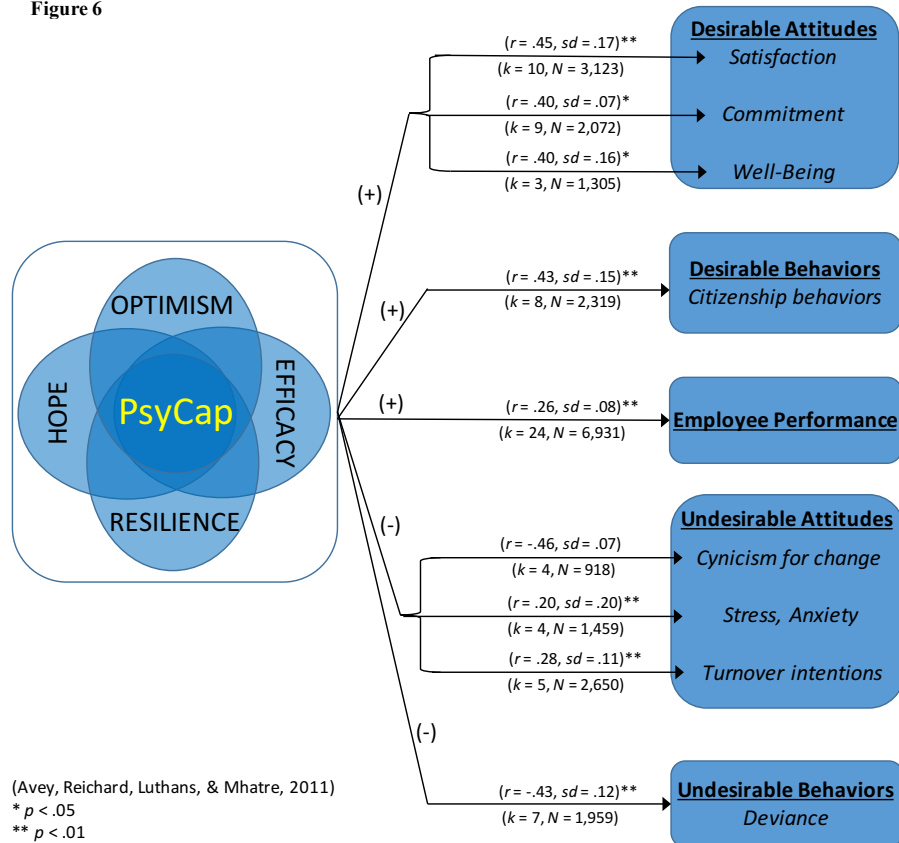
Taken together, the four resources synergistically interacting to form the core construct of PsyCap can be expected to lead to higher performance based on their reinforcing greater extra effort from individuals, promoting the generation of multiple solutions to problems, positive expectations about results leading to higher levels of motivation, and positive responses to setbacks. (Luthans, Avey, Avolio, & Peterson, 2010, p. 49)

A longitudinal study in the workplace related changes in PsyCap to changes in performance and indicated a causal relationship of higher PsyCap leading to higher performance

(Peterson, Luthans, Avolio, Walumbwa, & Zhang, 2011). A two-part study indicated that PsyCap has a significantly positive relationship with both performance and satisfaction (Luthans et al., 2007). This study also supports PsyCap as a higher order construct, indicating that it is a superior predictor of performance and satisfaction than are the individual components of PsyCap. A study including two samples within a large Australian financial firm found PsyCap to be related to participants' levels of financial performance, internal referrals, and manager-rated performance (Avey, Nimnicht, & Pigeon, 2009). (For more on the relevance of PsyCap to international businesses, see Appendix E – International Studies of PsyCap.) Avey et al. (2011) completed a meta-analysis of 51 independent quantitative studies regarding PsyCap's relation to performance. In aggregate, this study covered a total of 12,567 employees. This meta-analysis assessed PsyCap's relationship to desirable attitudes and behaviors, performance, and (negative) undesirable attitudes and behaviors, finding significance in the relationships (Avey et al 2011). Figure 6 below summarizes the results.



Figure 6

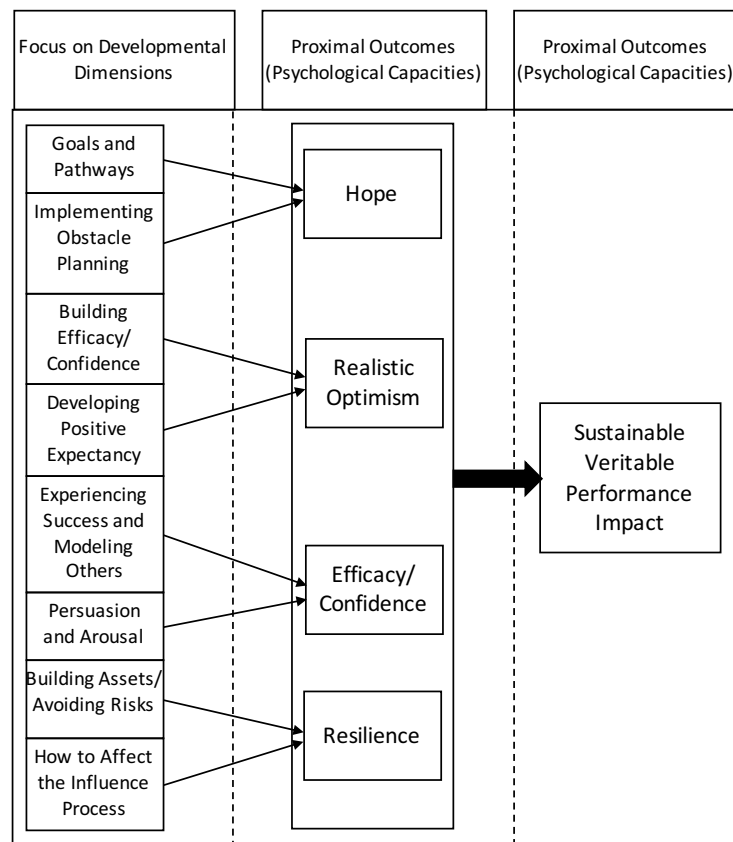


**Development.** As a somewhat stable state-like characteristic, PsyCap should be expected to be developable. Drawing upon the established development techniques for developing its constituent components, Luthans, Avey, Avolio, Norman, and Combs (2006) created a micro-intervention (one-to-three hours) resulting in preliminary support for developing PsyCap in training interventions. This study also indicates the incremental additional value gained through the positive interrelations between the four constituents of PsyCap. The intended increase in overall PsyCap is amplified as the training of one component overflows to boost the development of the others (Luthans, et al., 2006). Dello Russo and Stoykova (2015) completed a replication and extension study finding that a training intervention significantly increased PsyCap and that the results remained stable for one month, suggesting potential longevity of the training effects. Luthans, Luthans, and Avey (2014) conducted a study which supports that

academic PsyCap can be increased with a short training intervention. A study designed to measure attempts to develop PsyCap with a web-based two-hour intervention also indicated support of development (Luthans, Avey, & Patera, 2008). As mentioned above, the development of PsyCap is accomplished by development of its constituent components as shown in figure 7 below:

**Figure 7**

**Positive Psychological Capital Intervention**



*Note: This intervention is intended to affect each state as well as the overall level of psychological capital for performance impact. (Luthans, Avey, Avolio, & Peterson, 2010)*

## Conclusion

After a dozen years of development, it appears that PsyCap has yet to be absorbed into common business application. It was unknown to the executives I interviewed for this paper, and I could not find in the literature examples of its application beyond the few studies testing the

PsyCap training intervention. As both a business person and a student of positive psychology, I believe the body of work summarized here supports a conclusion that increasing PsyCap will very likely enhance both workforce well-being and business performance. This review reveals that PsyCap has rigorous and relevant academic scholarship sufficient to support business adoption. In addition, the premise that enhanced PsyCap would improve both employee well-being and performance has good face validity for business leaders and would strike a chord of intuitive resonance with managers.

### **Conclusion**

This investigation began in earnest in response to Seligman's observation that despite all its growth and promise, positive psychology had yet to take off as an idea and set of applications in the business world. He surmised that it must be due to a lack of a so-called "gold-standard" study showing a straight causal line from increased well-being to increased performance. Meanwhile, my classmates in the MAPP program proposed that perhaps businesses were not interested in the positive and were only motivated by profits.

Yet the research and investigation addressed here has shown positive psychology and studies in positive organizations to be well-advanced and attractive fields for academic scholars. There appears to be substantial interest in academic study of the actions and conditions that contribute to optimal human functioning, and even if the particular study Seligman described has not yet been done, there is an ample body of rigorous evidence about the benefits of the positive. At the same time, executives interviewed for this paper indicated that they are open to and interested in the topics of positive psychology. They also communicated that the lack of use of positive psychology is not because the research is insufficiently rigorous for business purposes. The combination of the review of PsyCap and the executives' articulation of their emphasis on

intuitive reasoning over academic evidence supports the conclusion that existing research is beyond adequate for corporate purposes. However, it appears that the good work being accomplished in academia is not reaching much of the business world. There are many possible reasons for these circumstances.

I believe it is possible that in general, academia and business have developed a habit of inadequate communication, and that also may be the case specifically with respect to positive psychology. Some have observed that the social sciences have moved away from a more pluralistic approach to scholarship involving research, synthesis, application, and pedagogy and are now heavily focused on only research (Ghoshal, 2005). If this is the case, then many academic scholars may now lack some of the skills necessary to position and deliver research for application. There is a good deal of academic discussion regarding this topic, particularly in the management sciences (Ghoshal, 2005; Latham, 2007; Rynes, 2007; Panda & Gupta, 2014). A prevalent belief is that there is a gap created from the rigor of academia driving research topics that are not relevant to business. This is not the case here. This paper has provided evidence that management views positive psychology as relevant while academia has produced rigorous research in positive methods.

It is worthy of further study to investigate whether 1) the application of positive methods can be packaged in a more usable way for business, and 2) if there is a better system or method of disseminating useful academic research to business.

On the first point, most of the practical methods to encourage flourishing lives that have been tested by researchers to date involve positive interventions designed for use as either an individual, or as dyads. I believe this model may require adjustment for effective implementation in organizations. The executive interviews indicate that installing positive psychology methods

for the workforce should be designed as a whole-system cultural change. Implementing a positive cultural change, in my experience requires delivery of ongoing training designed for various levels of employees, a method of continual reinforcement to sustain the change, and a designing of the positive tenets into the moral fabric of the organization. The new culture must also be supported by allowing it to influence the organization's definition of success. In the case of PsyCap, which I have suggested is the best over-arching construct for businesses to focus on, the training intervention that has been tested in prior research is a good start, but a far cry from this kind of culture change.

On the second point, I contend that the most parsimonious solution to bridging this gap involves ambidextrous facilitators who can locate and consume academic research, then translate and transform the academic theories into practical applications for organizations. Some academics do this through the publication of popular-press books (e.g., Adam Grant and Angela Duckworth), but many others do not. This is where the vision of the MAPP program comes in. MAPP creates application ambassadors who can absorb academic positive psychology and take it back to their professions and organizations.

In continuation of my journey into the MAPP program, my goal in undertaking this investigation has been to develop an understanding of what it will take to bring positive psychology more fully into the business world. It turns out that the pieces are already in place. The right research has been developed and the demand for it is strong. What appears to be most needed is the translation of particular ideas from the academic world into actionable products and programs tailored to the needs of the business world. I believe PsyCap is an prime example of a concept that is ripe for that task, and I hope to be an application ambassador for it as I develop facilitation models.

### **Appendix A – Diversity of Positive Psychology Topics**

Following is just a partial list of myriad and diverse topics that are associated with positive psychology: autonomy (Brown & Ryan, 2015; Niemiec & Ryan, 2013; Schwartz, 2004), biology and evolutionary selection, (Haidt, 2006; Hill, DelPriore, & Major, 2013; Isen, 2009; Lowe, Bower, Moskowitz, & Epel, 2011; Wilson, 2012; Wilson & Wilson, 2007), curiosity and interest (Kashdan & Silvia, 2009), emotional intelligence (Caruso, Salovey, Brackett, & Mayer, 2015; Crum & Salovey, 2013), eudaimonia (Huta, 2013, 2015), flow and engagement (Csikszentmihalyi, 1990; Nakamura & Csikszentmihalyi, 2009), forgiveness (McCullough & Witvliet, 2002; Sin & Lyubomirsky, 2009), goal setting (Locke, 1996; Oettingen & Gollwitzer, 2010), gratitude (Bono, Krakauer, & Froh, 2015; Emmons, & Mishra, 2011; Emmons & Shelton, 2002; McCullough, Root, Tabak, & Witvliet, 2009; Seligman, 2011), hope theory (Magyar-Moe & Lopez, 2015; Snyder, Rand, & Sigmon, 2002), intrinsic motivation (Brown & Ryan, 2015; Ryan, Huta, & Deci, 2008), meaning and purpose, (Baumeister & Vohs, 2002; Frankl, 1963; Kashdan & McKnight, 2009; Steger, 2009), mindfulness (Henry, 2013; Hölzel, et. al., 2011; Malinowski, 2013; Ricard, Lutz, & Davidson, 2014), optimism, (Carver et al., 2009; Haybron, 2013; Peterson & Steen, 2009; Reivich & Shatté, 2002; Schneider, 2001), positive emotions (Algoe, Fredrickson, & Chow, 2011; Fredrickson, 2002, 2009), relationships (Baumeister & Leary, 1995; Fowler & Christakis, 2008; Gable, Gonzaga, & Strachman, 2006; Gable & Gosnell, 2011), resilience (Masten et al., 2009; Reivich & Shatté, 2002), savoring (Bryant, & Veroff, 2007), self-efficacy, (Maddux, 2009), self-regulation (Baumeister, Gailliot, DeWall, & Oaten, 2006; Brown & Ryan, 2015), somatic intervention (Faulkner, Hefferon, & Mutrie, 2015; Shusterman, 2006), spirituality (Myers, 2013; Pargament & Mahoney, 2009; Pargament, Mahoney, Shafranske, Exline, & Jones, 2013), strengths (Peterson & Seligman,

2004; Rath, 2015), wisdom and choice (Baltes, Gluck, & Kunzmann, 2002; Kahneman, 2011; Kunzmann & Thomas, 2015; Schwartz, 2004; Schwartz & Sharpe, 2006, 2010).

**Appendix B – Representative Sample of Chapter Topics in the *Oxford Handbook of Positive Organizational Scholarship***

A representative sample of topics included in the *Oxford Handbook of Positive Organizational Scholarship* (Cameron & Spreitzer, 2012b): psychological capital (Youssef & Luthans, 2012), prosocial motivation (Grant & Berg, 2012), callings (Wrzesniewski, 2012), engagement (Rothbard & Patil, 2012), creativity (Zhou & Ren, 2012) and curiosity (Harrison, 2012), flourishing at work (Bono, Davies, & Rasch, 2012), energy (Spreitzer, Lam, & Quinn, 2012; Vogel & Bruch, 2012), positive emotions (Sekerka, Vacharkulksemsuk, & Fredrickson, 2012), passion (Perttula & Cardon, 2012), emotional intelligence (Ybarra, Rees, Ethan Kross, & Sanchez-Burks, 2012), humility (Owens, Rowatt, & Wilkins, 2012), compassion (Lilius, Kanov, Dutton, Worline, & Maitlis, 2012), hope (Carlsen, Hagen, & Mortensen, 2012), courage (Worline, 2012), integrity (Simons, Tomlinson, & Leroy, 2012), high quality connections (Stephens, Heaphy, & Dutton, 2012), reciprocity (Baker, 2012), civility (Porath, 2012), trust (Mishra & Mishra, 2012), humor (Cooper & Sosik, 2012), mindfulness (Kopelman, Avi-Yonah, & Varghese, 2012; Vogus, 2012), collective efficacy (Goddard & Salloum, 2012), innovation (DeGraff & Nathan-Roberts, 2012), appreciative inquiry (Cooperrider, & Godwin, 2012), authentic leadership (Avolio & Mhatre, 2012), peak performance (Smith, Lewis, & Tushman, 2012), resilience (Caza & Milton, 2012), sustainability (Hoffman & Haigh, 2012), spirituality (Sandelands, 2012), and positive deviance (Lavine, 2012).



### **Appendix C – Sample Question Guide for Executive Interviews**

**Title of the Research Study:** Executives' views regarding positive psychology and its potential for employee satisfaction and performance

**Protocol Number:** 824963

The qualitative interview section of this study was approved as exempt by the Institutional Review Board of the University of Pennsylvania. As required by the approval process, I completed the student level training in behavioral science human subjects research. Each subject received and waived the informed consent form required by the University of Pennsylvania Internal Review Board. Interviews were recorded on the NoNotes App, which also provided a service that manually transcribed and delivered printed transcripts of the recorded calls, or I kept hand-written notes during the conversions to track the answers given to each question.

1. Can you please describe any previous exposure to positive psychology you have encountered?
2. Do you have any opinions as to the potential beneficial application of positive psychology?
3. How would you characterize the difference between positive psychology and “self-help” advice?
4. Do you believe that the concept of positive psychology has a reputation as useful for business organizations, or as being a “soft” science?
5. Can you please discuss any prior experience you may have with positive psychology concepts in the workplace? Or examples of businesses you know of that have instituted positive psychology methods for the benefit of their workforce?

6. What is your assessment of the ability to enhance workforce well-being and satisfaction?
7. Are you aware that nearly 40,000 Sergeants in the US Army have been trained in positive psychology resilience concepts as a part of the Army's Comprehensive Soldier Fitness Program? And that the Army plans training for the entire force?
8. Can you please discuss your thoughts concerning whether or not enhancing workplace well-being would lead to improved workplace performance? What factors influence your opinions on this?
9. How would you describe well-being in the workplace?
10. Given the various theories, constructs, definitions, and mediators of well-being, are there any that you believe would be the most appropriate to target for use in the workplace?
11. Do you believe these same approaches would also improve workplace performance?
12. Which types of positions in organizations do you believe would receive the most benefit from these types of interventions?
13. Do you believe businesses in the U.S. have a moral obligation to improve employee well-being solely for its own sake, and no other end?
14. If you were presented with an investment opportunity for your business to improve workplace well-being and improve performance, how would you analyze the decision? Would you consider a lower financial return than normal, or require the same target return as other investment opportunities?
15. Please describe the types of evidence that would encourage you to pursue a project to enhance well-being and improve performance? In your organization, how would such a decision be made?

16. Which type of evidence would more useful to you in deciding to pursue a well-being project: a very high correlation with expected success, but a low average impact, or a lower (but still high) correlation with expected success, but a high average impact?
17. Please describe how you might weigh the variations in these two types of evidence and risk in pursuing a project decision.
18. Can you discuss times in which you have utilized or relied upon academic research in determining a business decision?
19. How do you weigh the relative importance of empirical evidence versus a theoretical understanding that resonates intuitively?
20. How do you measure performance in your workforce? How would you want to measure the impact of improving employee well-being and performance?
21. If you were to decide to proceed with a well-being implementation, should the end goal be a collection of individual interventions supported by academic research, or should the ultimate aim be a cultural change supported by sustained reinforcement?
22. Have you ever read about or heard of the concept of Psychological Capital (PsyCap), the amalgamation of hope, efficacy, resilience, and optimism?
23. What types of general personal attributes do you think contribute to superior levels of performance?
24. Do concepts such as workforce resilience, sustainable performance, worker purpose and engagement, and strengths-based inquiry sound better than positive psychology?

### **Appendix D – Additional Findings from Executive Interviews**

Respondents were asked to comment on appropriate goals for the implementation of a well-being initiative in the workplace. In particular, they were asked whether initiating such a plan should involve a smattering of interventions spread through time, or a universal cultural shift. There was general agreement among the responses that effective implementation of this sort would require an intention for system-wide application. Each described a plan that would be tantamount to cultural change. Affecting a cultural change would require many steps, layers, and waves of implementation, but long term, it would target the culture of the entire organization.

In response to whether different roles or levels within the organization might offer the business a greater benefit in response to a well-being initiative, most of the subjects stated that even if so, it doesn't matter. They believed that a successful application of positive psychology for the workforce would necessarily have to include all employees, or risk a loss of authenticity. This response aligns with the prior paragraph that suggests a whole system approach.

Results of lessor interest include a lack of awareness of the massive positive psychology resilience training program undertaken by the U.S. Army. There was also mixed and low intensity reaction to the use of the brand "positive psychology" in presenting employee initiatives. Positive was favored by the majority, and psychology was disfavored by nearly all respondents.

### **Appendix E – International Studies of PsyCap**

*International Interest in PsyCap.* PsyCap has been followed and investigated by scholars globally. Listed below are studies included by Luthans et al. (2015) of international papers:

China (Luthans, Avey, Clapp-Smith, & Li, 2008; Wang, Sui, Luthans, Wang, & Wu, 2014; Wang, Liu, Wang, & Wang, 2014), Korea (Choi & Lee, 2014), Australia (Avey et al., 2010), New Zealand (Roche et al., 2014), Romania (Karatepe & Karadas, 2014), South Africa (Cascio & Luthans, 2014; Reichard, Dollwet, & Louw-Potgieter, 2014), Vietnam (Nguyen & Nguyen, 2012), Pakistan (Abbas, Raja, Darr, & Bouckennooghe, 2014), Portugal (Rego, Marques, Leal, Sousa, & Pina e Cunha, 2010), and Egypt and the Middle East (Badran & Youssef, 2014; Youssef, 2011). (p. x)

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